

METHOD OF OBTAINING A SELF-SUPPORTED THIN
SEMICONDUCTOR LAYER FOR ELECTRONIC CIRCUITS

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ABSTRACT

The invention relates to a method of producing a self-supported thin layer of a semiconductor material supporting at least one electronic component or circuit or both on one of its faces, from a wafer of the material by thinning of the wafer. The wafer has a front face supporting or for supporting at least one electronic component or circuit and a rear face. The method is remarkable in that it includes: a) implanting atomic species in the interior of the wafer through its rear face to obtain a zone of weakness defining a front portion extending from the front face of the zone of weakness and a rear portion formed by the remainder of the wafer; b) detaching the rear portion from the front portion; and c) if necessary, repeating steps a) and b) on the rear face of the front portion until the front portion has the desired thickness for constituting the self-supported thin layer.

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